

ABSTRACT

An exemplary method for making a memory structure having different-sized memory cell layers comprises forming at least two layers of ferromagnetic materials, forming at least one mask layer above the ferromagnetic materials, patterning the at least one mask layer, etching the ferromagnetic materials using the at least one mask layer as a first etch transfer mask, laterally reducing a planar dimension of the at least one mask layer to be narrower than the ferromagnetic materials, and etching a layer of the ferromagnetic materials using the reduced at least one mask layer as a second etch transfer mask, such that the ferromagnetic layer being etched becomes a different lateral size than another ferromagnetic layer of the ferromagnetic materials.